THE POPULATION PROBLEMS OF INDIA AND PAKISTAN

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INDIA'S population problem arises primarily out of an extremely high fertility, accompanied by a high mortality which is only slowly declining. The resulting increase in numbers, which amounted to more than four million a year in an undivided India, apart from the very low survival value, need not constitute a problem if the additional population could be absorbed without reduction in the standard of living. But this standard is so low that any further addition to the number of poor families could well be disastrous; and such families are indeed so numerous that any further increase in the total population must intensify what is already a great problem. India's density in agricultural as well as in the poorer strata of urban society, though not as great as in certain overcrowded parts of the world, is too great to permit an attitude of *laissez-faire*; it is difficult to see how more people could be taken care of. Nor is there any migration outlet for the Indian people. Even if some countries could welcome Indians as immigrants, they cannot possibly receive four million people a year; nor is it reasonable to expect such a large number of "stay-at-home" people to move out of India every year. The net addition of four or more million a year, or fifty million in a decade, or a grand total of 350-400 or even more million in India, need not constitute a problem if an overwhelming majority of the population, not to speak of everyone, enjoyed the irreducible minimal requirements of decent human existence in terms of food, health, clothing, shelter, employment and leisure for recreation. But this is not so in India and, what is worse, is the well-known and depressing *qualitative* aspect of the Indian population problem. And as the quality of the people is related to its numbers it cannot be improved unless these are controlled. Hence the importance, if not the danger, in the number of India's teeming millions to her economic and social development and her place in the modern world.

Growth of Population

The population of the combined Dominions of India and Pakistan to-day is nearly 450 million, or about a fifth of the total world population. The estimated population of the two Dominions for 1947 was 336 million for India and 71 million for Pakistan, but these are only estimates, probably under-estimates, as there are many unknown factors in Indian demography.

In the sixteenth century, according to some rough estimates, the population of the subcontinent was about 100 million. In the middle of the nineteenth century the figure reached about 150 million. In 1881, when the first regular, although incomplete, census was taken, the population stood at 254 million. In 1931, fifty years later, the census revealed 353 million, representing an increase of 10·6 per cent over the 1921 figure. The last census of 1941 showed a total of 389 million —i.e. an increase of 50 million (15 per cent) over the 1931 figure. The 1951 census may show a similar increase, if the present trends of mortality and fertility continue.

The *rate* of increase of the Indian population, though high, has not been abnormal. For instance, between 1872 and 1941 the population of undivided India grew by 54 per cent. The United Kingdom during the same period increased by 56 per cent., and Japan by 136 per cent. So the rate of increase has not been very rapid. But the growth over the years has not been uniform, for the controlling factor has not been increasing fertility but fluctuating mortality. The population has responded to the presence or absence of wars, famines and epidemics. As these

checks appeared or disappeared, the population grew and declined accordingly. Voluntary limitation of births has not played any significant rôle in determining the size of the Indian population. Till 1901 the population was almost stationary. The years between 1901 and 1921 witnessed an irregular and spasmodic growth of population. But between 1921-31 and 1931-41 the country registered a growth of 10·6 and 15 per cent respectively. And if the present public health conditions continue unaccompanied by any famine, the 1951 census may show a large addition.

But the problem in the Indian subcontinent is not the rate of increase but the *net addition* to the existing population every decade. Because of the large existing population even a modest rate of increase of 10 or 15 per cent yields a net gain of some 50 million (as during 1931 to 1941), in itself larger than the population of any European country except Germany or Russia, or any Latin-American country. And it is this large net addition that constitutes the problem, for it nullifies all efforts to improve the admittedly very low standard of living of the Indian people. All efforts to increase the production of food, other commodities and services to give a better share per head to the existing population are largely frustrated by an increasing addition to the population. Thus, in the present circumstances, improvements in the Indian standard of living and the increasing growth of population are incompatible.

Fertility

Among all demographic factors the rate of fertility is the most important, for international lack of balance in fertility constitutes the crux of the world population problem. Within a nation fertility differentials between different ethnic, cultural, economic and religious groups constitute a serious problem in the formulation of any democratic population policy.

If Indian vital statistics are accepted as fairly reliable, despite their well-known inadequacy due to under-registration, we find that the birth rate is between 45 and 50. The figure for 1941 is 43, and this is comparable to high birth rates in Egypt (47 in 1940), Palestine (40 in 1935), Puerto Rico (40 in 1942), and Mexico (42 in 1940). A discussion of the corrections to be made in the estimated and recorded rates of fertility cannot be entered into for lack of space, but Table 1 gives India's birth and death rates per thousand from 1885 to 1935. The significant fact about the birth rate is not that it is one of the highest in the world, but that it has shown no signs of decline during the last fifty years. It is obvious from the table that there is no definite downward trend and the little variation that is seen must be taken to be a natural and normal fluctuation for such a high figure.

As for rural-urban fertility differentials, the experience of India conforms to that of other countries. In Western and industrialized countries, the decline in fertility began in urban areas, and the rural areas tended to follow the downward trend after a time lag. This has been so because industrialization has been accompanied by the widespread adoption of the planned-family habit. Though India may conform to this

TABLE 1

BIRTH AND DEATH RATES OF INDIAN SUBCONTINENT PER THOUSAND SINCE 1885

Year	Birth Rate		Death Rate		Natural Increase	
	Recorded	Estimated	Recorded	Estimated	Recorded	Estimated
1885-90	36	—	26	—	—	—
1890-01	34	—	31	—	—	—
1901-11	38	50·7	34	44·2	4	6·5
1911-21	37	49·3	34	44·2	3	5·1
1921-31	35	46·7	26	33·8	9	12·9
1931-35	35	46·7	24	31·2	11	15·5

experience eventually it has not done so yet. The lower fertility in Indian urban areas must be explained in terms of the adverse sex ratio in the cities where the relative paucity of females and the absence of wives are noteworthy. Indian industrial workers have a rural background, and they come to the cities in seach of employment only when they are faced with agrarian distress. As such they come to the cities single, unaccompanied by their wives and children. When agricultural conditions improve, many of these industrial workers return to their villages and to agriculture. Another reason for this rural-urban fertility differential may be the high infant mortality rate in the cities. Thus the differential cannot as yet be explained in terms of either the availability or the adoption of contraceptive techniques.

An examination of the fertility rates by occupational and income groups reveals, however, a slight decline in the high income groups. These groups generally embrace the so-called higher castes, who have better educational qualifications, better jobs and consequently a higher standard of living. Here again the lower fertility cannot be explained in terms of birth control. Though adequate data on the question are lacking, it seems probable that the cause lies in the social ban on widow remarriage, which withdraws many women from potential motherhood. As this ban is not generally observed among the lower income groups (which roughly correspond to the so-called low castes), their fertility is high. Thus, the small decline in fertility that is registered for certain groups of the Indian population has not become a marked trend and the differential is not large enough to have an adverse effect on the future growth of population. The population in 1951 for both the Dominions will be about 450 million, if the present fertility and mortality rates continue. So if there is no change the only factor that will contribute to the reduction of the future growth of the Indian population will be not the deliberate control of the birth rate but high mortality. And this is something that cannot be looked upon with equanimity.

Mortality

The population growth of the subcontinent during the last century has been conditioned mainly by the high but fluctuating death rate. Famines, epidemics, the general insanitary environment and wars have contributed to the death rate, though the last factor has almost disappeared in the last half-century. During " normal " years the death rate has been consistently high because of the striking lack of public sanitation and hygiene, and widespread mal- and under-nutrition of the population. The death rate rose distressingly during bad years, when epidemics and famine broke out owing to scarcity of food. It can be said with some truth that famine and epidemics alone have controlled the growth of population in the Indian subcontinent during the last hundred years.

The death rate is high—30 per thousand. The recorded death rate was 24 per thousand for 1931, and 22 for 1940, but these are under-estimates because of incomplete returns. This means that more than 10 million people die every year in India and Pakistan! While the all-round death rate is appalling enough, the death rate by various age groups is equally unusual. The most disquieting factor of the death rate is the high incidence of mortality among first-year infants, women in childbirth and women of the reproductive age groups. The infant mortality rate is very high—nearly one-fourth of the babies born die during their first year! According to official estimates, about half the deaths among infants occur in the first month and, of these, nearly 60 per cent in the first week. Mortality remains high throughout early childhood. About 49 per cent of the total mortality in any given year is among those below 10 years of age, while the corresponding figure for England is only 12 per cent.

To sum up the mortality figures: out of every hundred babies born, one-quarter die by the time they can reach their first birthday. When the fifth birthday arrives, 40 per cent have disappeared through death, and when the twentieth birthday is at hand only 50 per cent are left! Only 15 per cent survive to the sixtieth birthday.

As for maternal mortality the figures are equally shocking. Sir John Megaw, when he was Director-General of Medical Services in India, made a random sample survey, and arrived at the maternal mortality rate of 23·5 per thousand births. That is, at least 200,000 women die every year during childbirth; and of every thousand girl-wives 100 are doomed to die in childbirth!

But despite the present mortality rates, the average annual addition to the population of both the Dominions was five million. During the last two decades there has been, however, a steady fall in the general mortality rate. A further fall is bound to occur if the large-scale programmes for improving the health of the country by various planning committees are effectively put into operation. It has been calculated that even a slight improvement in the present health conditions can save three million infant lives. When this is done the population will increase not by five but by eight million a year. And it is possible that the 83 million increase that took place between 1921 and 1941 could take place between 1941 and 1951. To repeat: a planned and purposeful control of mortality without a corresponding control of the birth rate can only have disastrous consequences for the Indian people.

To-day, however, the death rate is the decisive factor in Indian demography. No comment is necessary on this inordinate and tragic loss of human lives. Nor is this all. There are many who do not die but who, because of the high and severe morbidity, cannot be counted among the truly living, i.e. among those who are healthy, active and gainfully employed.

Morbidity

If the available information on birth and death rates is somewhat incomplete and unreliable, that on the incidence of diseases is even more so. Rural India and Pakistan, which together shelter nearly 80 per cent of the total population, have no adequate hospitals, clinics or other general or specialized medical services. Thus there is no way of estimating the total morbidity of the population. Some information, however, is available for urban areas, and such figures must be multiplied five- or six-fold to get a complete picture for all India.

For instance, according to official sources, in normal years, malaria is responsible directly for at least one million deaths every year. This really means that at least three million people die of malaria every year. If three million people *die* of malaria, it also means that at least ten million people *suffer* from it. The cost of treating the affected people—granting that they get some kind of treatment, expert or quack—and maintaining them in low health, and the indirect cost of man-hours lost in the fields, factories and offices, must be enormous. When patients have recovered from an attack of malaria their efficiency, already low as a result of poor nutrition, is impaired still further, making them less resistant to the many diseases prevalent in the Indian countryside. Diseases ending in death are said to be selective in the sense that they wipe out the weaker elements, but they cannot be said to improve the quality of those who narrowly escape death. If Indian morbidity statistics are interpreted in this manner, the resulting picture is too grim to need any comment.

Not only malaria, but cholera, kala-azar, smallpox, beri-beri, dysentery, tuberculosis, hookworm disease, filariasis, guineaworm and venereal diseases are ever-present and take their toll. Then there are leprosy, blindness and partial-sightedness, mental disorders and mental deficiency, and a score of other infirmities. All these are curable or, what is more important, in some measure preventable, but the lack of comprehensive and organized medical services manned by an adequate number of competent personnel makes the problem very formidable. Curative medicine will only half solve it. As long as vitality and resistance to disease are low, as they must be in the presence of so much poverty, malnutrition and ignorance, and as long as the insanitary and unhygienic environment of the towns and villages persists, any medical approach to this problem can be only fragmentary.

Despite the inadequacy of the returns on the specific causes of mortality, a rough idea

can be obtained for a representative pre-war year from Table 2, which summarizes the death rates for 1939. The general death rate of 22·2 for 1939 was distributed as shown in the table. It is highly probable that where deaths have been unattended by doctors, as considerable numbers are, the returns usually list " fever " as the cause of death. This lack of precise information nullifies the efforts of the public health department because the authorities, who are anxious to control the death rate, do not know what exact causes contribute to the high death rate.

cent of the girls married in India are below the age of fifteen. Though child marriage as such has largely disappeared, most girls between 15 and 20 are already married. The girls in rural areas marry as soon as they reach puberty, begin bearing children early and reduce the period of lactation, thereby possibly shortening the intervals between childbirths and increasing the number of premature deaths.

The second factor is the universality of marriage. Everyone sooner or later gets married. It is a quasi-religious duty. As

TABLE 2

DEATH RATES IN INDIAN SUBCONTINENT IN 1939

	Cholera	Smallpox	Fevers	Dysentery and Diarrhœa	Respiratory Diseases	Injuries	All Other Causes
Deaths per 1,000 of population	0·4	0·2	0·1	13·0	0·9	1·8	5·8
Percentage of total deaths ...	1·8	0·9	58·1	0·5	4·1	8·1	26·5

Social Factors

The demographic situation of any region is largely the product of its peculiar social characteristics, which in their turn affect births, deaths and migration. The population problem in India might conceivably have been very different if the social institutions of early marriage, universality of marriage, the ban on widow remarriage and the joint Hindu family and other institutions and attitudes resulting in an adverse sex ratio, among others, did not exist. But as they do, with a socio-religious tradition and sanction behind them, and as they condition the lives of an overwhelming majority of the people, the demographic problem has become what it is to-day.

Early marriage and universality of marriage are dominant features of the social scene. Indian girls attain puberty between the ages of twelve and fifteen, and though often physically immature they are physiologically ready to bear children. And cases are not wanting where reproduction has begun at the age of fourteen or fifteen. The Report of the Age of Consent Committee and the reports of the All-India Women's Conference have estimated that nearly 50 per

economic security is not a prerequisite to marriage and as there is generally no individual choice in obtaining a partner, there is no economic deterrent to marriage. For a representative census year like 1931 we find that 467 males and 492 females out of every thousand were married. That is, taking into consideration all widows, some widowers, and ascetics and mendicants, almost everyone of marriageable age was actually married. When factors favourable to the postponement of marriage—e.g. prolonged education, lucrative employment, eagerness for personal and social advancement, free choice in securing life's partners, and other considerations that operate in a normal Western society—will come to operate in India and Pakistan, it is difficult to say. But the sooner such considerations come to operate, the nearer the Indian peoples will be to the solution of some of their social problems.

A third striking characteristic of the Indian social scene is the scarcity of females. There has been a deficiency of women in the population throughout the Indian census history. In 1941 there were only 934 females for every 1,000 males. In 1931 and 1921 the ratio was 940 : 1,000. The sex ratio in

England and Wales in 1940 was 1,000 : 940, revealing a contrasting deficiency of males. The steady fall in the proportion of females to males has been going on in India since 1901, and the 1951 census is not expected to reveal any significant change.

Several explanations have been offered for this phenomenon. Some explain it as the result of relative under-enumeration of women. This is possible, but during the last fifty years the efficiency of the Indian census organization has consistently improved, yet the adverse sex ratio has increased rather than decreased. Some argue that excessive masculinity is an index of " racial " decadence. But the sex ratio is more unfavourable in the north and north-west—parts of present Pakistan region—where the so-called " martial races " live. We have little knowledge of what constitutes " racial decadence," and still less scientific evidence of its causes and symptoms. If there is any truth in this explanation the virile people of the north-west must be most decadent. As we cannot have it both ways there seems to be little truth in this explanation.

Some others have offered a biological explanation. According to the Census Commissioner for Bombay (1921) " the Indian caste system with its exogamous *gotra* (sept) and endogamous caste is a perfect method of preserving what is called in genetics ' pure line.' The endogamy prevents external hybridization, while the exogamy prevents the possibility of a fresh pure line arising within the old one by the isolation of any character not common to the whole line." The Census Commissioner for India (1931), accepting this view, comments " whether this proposition be entirely acceptable or not, it may be conceded that if once a caste, whether as a result of inbreeding or some totally different factor, has acquired the natural condition of having an excess of males, this condition is likely to be perpetuated as long as inbreeding is maintained." This explanation is at best plausible, but we have very little knowledge about the presence of a genetic factor, if any, in the Hindu caste system. While there may be some truth in this explanation in the sense that excessive inbreeding is generally harmful, it does not explain the sex ratio *at birth.*

The available statistics tell a different story. Actually, between the ages of one and five, India has an excess of girls, and only at the next age group the sex ratio is reversed in favour of males. A more rational explanation for the paucity of females is that though the female infant is definitely better equipped by nature for survival than the male the advantages she has at birth are probably neutralized in infancy by comparative neglect, and in adolescence by the strain of bearing children too early and too often. As Hindu parents put a greater premium on male children, they are apt to treat female children with relative neglect, especially when they are assailed by infantile ailments. This, coupled with early marriage and a high birth rate, results in more and earlier deaths among women.

We have some comparable evidence in China that supports this view. Dr. Ta Chen, discussing the sex ratio in the Kumming Lake region, observes : " It seems clear that in China relatively more female infants are born, but as they grow up the male babies gradually catch up with them in numbers, evidently indicating a proportionately higher mortality among female children. This may be due to the fact that in the Far East generally and in China particularly parents usually put higher value on male children for the perpetuation of the family line and for the observance of filial piety. Thus female children are unconsciously neglected, thereby leading to the higher death rate among them."

The social ban on widow remarriage is yet another reactionary feature of Indian demography. The demographic situation is closely interwoven with social problems, for one undesirable social institution leads to another, and so on, in an endless chain. This practice of " socially sterilizing " the widows results in considerable disparity in age between husbands and wives. Since most widowers remarry and since they cannot marry widows, they have to seek wives among girls much their juniors. This leads to a still further increase in the number of widows, for the old

husband passes away, leaving his young wife behind. And, of course, she cannot remarry. The disproportionate sex ratio and the resulting deficiency of women keeps up the custom of early marriage for girls. As bachelors and widowers have to take brides of any age they can get, the disparity between partners is increased. This difference in age increases widowhood. Since widows cannot remarry, widowhood increases the already existing shortage of eligible brides—thus completing a vicious circle.

The two significant facts that have emerged about the wasteful balance between births and deaths are the large decennial increases in the population and the tremendous human cost at which this increase is being maintained.

Improvement of Agriculture

What is the way out? The problem of population has to be considered in relation to the means of sustenance, mainly food supply. Nearly 70 per cent of the population is dependent on agriculture for a livelihood. As the mouths to be fed every year increase, the area of productive land diminishes. That there is pressure on the land of both Dominions to-day cannot be denied. Agriculture is characterized by primitive methods of farming, dependence on the vagaries of the monsoon, subdivision and fragmentation of land, consequent on the Hindu and Moslem laws of inheritance which enjoin the succession of immovable property by all male heirs, usually in equal proportion, and lead to uneconomic holdings and to an excessive dependence by most people on the land for their livelihood. Moreover, a quasi-mediæval land-tax system has created a large number of parasitic middlemen who have come to possess undue rights on land, claiming a considerable share of the income arising from it which they do nothing to earn. The primitive technique of Indian farming is responsible not only for the low yield per head, even when compared to countries like Japan and China, but also for the gradual deterioration of land with soil erosion and deforestation.

This does not mean, however, that there is no scope for improving farms and their yields. According to 1939 official statistics one-third of the cultivable land in both the Dominions lies idle—not fallow. The government statistics for the undivided India (which exclude the Indian States) are set out in Table 3, which shows that of a cultivable area

TABLE 3

UTILIZATION OF LAND IN INDIAN SUBCONTINENT IN 1939

Agricultural Area of the Provinces	Millions of Acres
Net area of professional survey ...	... 667·4
Area under forest	... 89·5
Area not available for cultivation ...	... 145·0
Cultivable waste other than fallow	... 153·6
Fallow land	... 51·0
Net area sown with crops	... 229·9

of 432 million acres, only 53 per cent is sown with crops, 11·8 per cent is fallow, and not less than 35·8 per cent is cultivable but left waste. Then there is land "not available for cultivation." About this land the Royal Agricultural Commission (India, 1926) said: "It is difficult to believe that the whole of the vast area now classed as not available for cultivation, amounting as it does to 150 million acres, or 22·5 per cent of the total area of British India (provinces), is either not available for cultivation or not suitable for cultivation."

The Dominions, therefore, have not exhausted their supply of cultivable land, and what is cultivated appears to be eroded and exhausted because of the primitive technique of farming. With scientific agricultural methods of erosion prevention and soil reclamation the cultivated land can be made to double its present yield and bring much of the so-called uncultivable waste under profitable cultivation. But such an improvement, however welcome, would touch only a fringe of the problem.

While increased yield and greater acreage of cultivation are possible with the aid of science, they cannot by themselves afford a better standard of living, or completely solve the population problem, unless and until a substantial number of people now dependent on land are transferred to some other productive employment, such as industry.

Industrialization

Industrialization is often offered as a

remedy for Indian population problems. A discussion of the possibilities of rapid and large-scale industrialization of the subcontinent is beyond the scope of this paper, but it must be pointed out that the basic prerequisites for industrialization—namely, raw materials, capital resources, skilled labour, a market and technological knowledge—are already available in some measure. The industrialization that has taken place during the last thirty years, however, has not helped to ease population pressure, because it has been piecemeal and unplanned, and the percentage of population gainfully employed in modern industry has been less than 1 per cent of the total. This haphazard industrialization has also led to the decay of cottage industries, causing further unemployment. Only planned large-scale and rapid industrialization and the development of cottage industries—for there need be no conflict between the two—can keep pace with the growing population and siphon off the surplus population from the overcrowded land to factories.

Industrialization in both India and Pakistan is important in the solution of their population problems for two reasons. It will increase the productivity of labour and create an abundance of badly needed commodities and services and transform the present economy of scarcity into an economy of abundance. Secondly, and this is probably more important in these areas, industrialization will encourage the development of new urban patterns of living which lead to the control of the high birth rate. The " why " of this process need not be discussed here, but this has been the experience in the United Kingdom, the United States and the West generally, and in Japan. There is no reason why India and Pakistan should not conform to this experience of other countries where industrialization has been accompanied by declining fertility.

Migration

What about migration as a solution to these population problems? As far as external or internal emigration is concerned there seems to be no opening, because all the available land in the world is either colonized or under the control of some country or other. Whether or not some of these countries, like Australia, Brazil and Canada, are thinly populated with empty spaces, it is out of the question, because these countries will not have millions of Indians as immigrants. World conditions are not yet ripe for the adoption of an international migration policy based on the just needs and available resources of various countries and peoples. And once we grant, as we must, that every country must have the right to determine the composition of her population, we cannot object to the unwillingness of certain countries, however thinly populated they may appear to be, to receive large numbers of immigrants from India and Pakistan. Nor do these Dominions wish to create unhappy minority problems as in the Union of South Africa. The total number of Indians settled overseas as permanent immigrants to-day amounts to about four and a half million, but the annual increase of population in the subcontinent is about five million. Even were emigration outlets available it is unreasonable to expect a major portion of this annual increase to leave their homeland. For India and Pakistan such relief may not even be a temporary solution. All the available evidence regarding the world's great migrations shows that the immediate effect of large-scale emigration is to reduce the population of the sending country, but that this effect has always been short-lived because the vacuum created is soon filled up.

As for the possibility of internal migration as a method of relieving the population pressure, there is not much scope either, because there are no empty spaces within the geographical confines of India and Pakistan. There are, of course, certain provinces and regions where the crude density per square mile is relatively low, as in Assam in India and in Baluchistan in Pakistan. During the last fifteen years, half a million immigrants went to Assam from other provinces, particularly Bengal. The provision of some admittedly inferior land for half a million people during a decade and a half, when the country's population increased by more than

fifty million people, is only a drop of relief in an ocean of increase.

Certain patterns of inter-provincial migration established in India during the last thirty years show that such migration has been going on constantly. The Assam plantations, for instance, get their labour supply chiefly from distant Chota Nagpur. The nearby Bengal peasants are not attracted by these plantations, nor are they absorbed by the Bengal jute mills, but they move in to occupy the land in the Assam valleys. The coal mines in Chota Nagpur do not attract the people nearby, and so labourers have to be recruited from the United Provinces and Bihar. Then there is the continuous rural exodus during times of agricultural distress. All these show that the excess population is moving out into some neighbouring province. We have no reliable figures, but these population movements are more of a seasonal migration and do not have any permanent effects. And then, when one group of people has moved out of a certain province, another group of people seems to be moving in. So the net result of such inter- and intra-provincial movements does not seem to constitute any relief to the pressure on the land.

If migratory movements between different regions are to be explained as a response to the " pull " of prosperity from less crowded areas, rather than the " push " of poverty from overcrowded areas, there are no regions in the subcontinent where the standard of living of the masses is markedly higher than in the rest. The variations in the different levels of living in different provinces and agricultural regions are not significant enough to encourage inter-provincial or inter-regional migration. After all, migration occurs from a region where the level of living is low to one where it is high. There are no conditions so absolutely unfavourable as to push people outside their regions if they have nowhere else to go. Thus, whatever internal migration that has taken place in the last thirty years has been in response to rigorous famines or to the construction of new irrigation projects and canals which have rendered the cultivation of more land possible. As severe famines or prosperity-promoting irrigation projects are not annual occurrences, the impetus to migrate has not always been present. Then there are other factors that constantly nullify the urge to migrate. Conditions of climate, language, diet, manners, customs and caste restrictions are not uniform all over the subcontinent, and people moving from one part of the country to another may find themselves in a strange land, although they are among fellow Indians. Forsaking traditional homes and farms in favour of distant places is fraught with psychological difficulties, even though the new homes promise relative affluence.

In these circumstances internal migration offers no substantial relief from population pressure. And the partition of the country which has already forced communal migrations upon both the Dominions renders the prospects of further inter-provincial migration dim.

Birth Control

The last and the most important solution is birth control. We need not discuss the question in general terms—science has long since given its verdict in favour of contraception—but may consider the vital part it has to play in Indian population policy, along with the modernization of agriculture and the industrialization of the national economy.

Apart from the general rural conservatism of the masses that offers resistance to every reform there is no organized resistance either by the Government or the Church as in some countries. Nor are the Indian religions opposed to planned parenthood. It will not be a hard task, therefore, to enlighten the public mind as to the benefits of birth control. Once the public health authorities begin to emphasise its importance it will spread even to the traditionally forgotten villages. Once mothers are educated in the belief that there is a scientific device to meet their desperate, albeit latent demands, birth control will make rapid headway. There are, of course, certain special difficulties which should be taken into account before planning a network of birth-control clinics. It should be recognized that both in India and in

Pakistan a majority of the people live under backward conditions. Matters like bathrooms, running water, privacy, the cheapness, reliability and availability of contraceptives, and the illiteracy of women need attention. No matter what the obstacles, this reform must be carried through.

Fortunately the question has not been completely ignored. The authoritative Health Survey and Development Committee appointed by the Government of India observe, in their report (1946): "All of us are agreed that when childbearing is likely to result in injury to mother or infant there is every justification for the practice of contraception. In such cases it should be the responsibility of Governments to provide instruction regarding contraception in maternity and child welfare centres, dispensaries, hospitals and any other public institutions which administer medical aid to women. We also consider that the supply of contraceptive requisites should be made free of cost by the State to necessitous women when the practice is advocated for reasons of health. There is also unanimity among us in respect of State action in two other directions, namely: (1) control over the manufacture and sale of contraceptives, as in the case of food and drugs; and (2) assistance from public funds towards research for the production of a safe and effective contraceptive."

But the most important need is to provide contraceptive advice on *economic* grounds. Even this authoritative committee could not shake off a traditional obscurantism and include poverty and the low standard of living as pressing reasons for adopting contraception and limiting the size of the family.

The Indian National Congress, however, set up a National Planning Commission during the war, under the chairmanship of the present Prime Minister, Pandit Jawaharlal Nehru. One of the committee's resolutions recommends: "In the interest of social economy, family happiness and national planning, family planning and a limitation of children are essential, and the State should adopt a policy to encourage these. It is desirable to lay stress as well as to spread knowledge on cheap and safe methods of birth control. Birth-control clinics should be established and other necessary measures taken in this behalf and to prevent the use or advertisement of harmful methods." The resolution is significant enough, but it goes on to add: "An eugenic programme should include the sterilization of persons suffering from transmissible diseases of a serious nature such as insanity or epilepsy." This resolution was adopted by the National Planning Commission when India was not free and when it had no governmental authority. Now that the chairman of the committee is the Prime Minister of India it is to be hoped that the resolution will not remain a pious sentiment on paper, but will be translated into action. The population problems of India and Pakistan are distressing enough already, and any delay could only make them worse.

Human Conservation

In brief, despite the unprecedented scientific advances in the world during the last thirty or forty years, there is an enormous human loss in India and in Pakistan from birth to old age. With all the available resources of scientific knowledge, skill and facilities for protecting people's health, and curing or alleviating the many ills and disabilities to which they are exposed, thousands of lives continue to be wasted.

Living to-day has become complex and difficult compared to conditions a century ago. The majority live in overcrowded villages which have changed their faces but are still without any sanitary or medical facilities, and those who live in towns and cities find themselves in crowded conditions where earning a living, rearing children and running a home have become formidable problems. Despite our belief in the intrinsic value of human life as a central value of our culture, we have offered resistance to certain reforms that encourage healthy and purposeful living. Human wastage and loss, therefore, persist long after they have become unnecessary because of certain traditional ideas and beliefs that still linger from the past

when we were largely helpless against the diseases and dangers of life, and more or less ignorant of human needs and possibilities. To-day, to some extent, much human waste is tolerated because of a fundamentally defeatist belief in man's helplessness against superhuman and mysterious social and natural forces that are supposed to control our social life and make such loss inevitable. Perhaps not a little of the tragic waste of life is due to a conviction that human ills and misery are well-merited punishments for our misdeeds and guilt. Many a marvel of medical advance has been more or less opposed as interfering with divine purpose which had ordained human suffering. While belief in "fate" as a controlling factor is slowly tending to disappear, it has not disappeared completely. These fatalistic beliefs persist in every society, but much more in the Indian subcontinent than elsewhere, long after they have been rendered obsolete by scientific knowledge which is powerless to displace them. The way out is to cease clinging to ideas and practices that are archaic and incompatible with a democratic affirmation of human values. The sooner we do this the better and easier will be our approach to human problems of life, longevity and death.

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